IOWA DEPARTMENT OF TRANSPORTATION

To Office Bridges and Structures **Date** October 22, 2003

Attention All Employees Ref No. 521.1

From Gary Novey

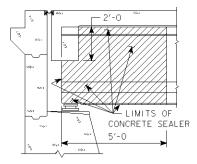
Office Bridges and Structures

Subject Methods Memo No. 56 (Sealing of PCBM Ends)

Because of problems with corrosion of prestressed beam ends at bridge deck expansion joints, the following changes have been made to the office policy and standards.

1. The following note and updated detail have been added to the CADD Standards 4542-4548 (M4542-M4548).

"CONCRETE SEALER SHALL BE FIELD APPLIED TO THE ABUTMENT SEAT AND PRESTRESSED BEAM ENDS IN ACCORDANCE WITH STANDARD SPECIFICATION 2403.21 D. THE SEALING SHALL INCLUDE PORTIONS OF THE PRESTRESSED BEAM-ENDS THAT ARE NOT EMBEDDED IN THE ABUTMENT OR PIER DIAPHRAGMS AS DETAILED ON THIS SHEET. SEALING SHALL BE DONE AT ANY LOCATION WHICH HAS A BRIDGE DECK EXPANSION JOINT."

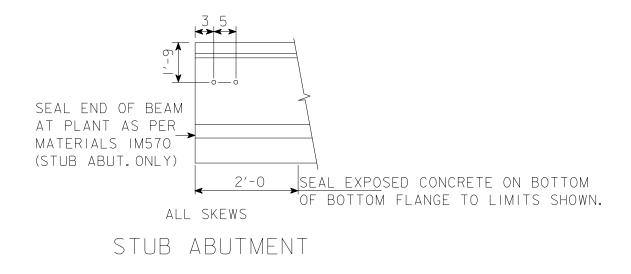


CONCRETE SEALER LIMITS FOR PRESTRESSED BEAM

In addition, the following note has been added to the Prestressed Beam CADD Standards 4600, 4610, 4620, 4630, 4636, 4637, 4638 and 4650 (M4600, M4610, M4620, M4630, M4636, M4637, M4638 and M4650)

"WHEN EXPANSION JOINTS ARE USED, CONCRETE SEALER SHALL BE APPLIED TO THE PRESTRESSED BEAM END SECTION. THE SEALING SHALL BE IN ACCORDANCE WITH MATERIALS I.M. 570 AND 491.12."

2. The following updated detail has been added to the PCBM diaphragm CADD Standard sheet 1036 (M1036).



3. The following note has also been added to the "Estimate Reference Information Notes".

EST113/MST113

INCLUDES FURNISHING AND PLACING CONCRETE SEALER ON BEAM ENDS AS WELL AS ABUTMENT SEATS / PIER SEATS AS NOTED IN THESE PLANS.

Please include these changes on all prestressed beam projects currently being detailed that have expansion joints. Until updated standards can be released plan sheets will have to be updated individually.

GAN:DGB:bj